## BOOK REVIEW

William Bartram, Interpreter of the American Landscape, by N. Bryllion Fagin, Associate in English, the Johns Hopkins University. 228 pp. octavo. Baltimore, Johns Hopkins Press. 1933. \$2.25.

All those interested in early entomological history in America will welcome this new biography. William Bartram not only was a great-uncle of the famous entomologist Thomas Say, but it is also known that he guided at least in part the latter's youthful studies in a way that profoundly influenced his later scientific activities. Bartram also for long years was closely identified as colleague with a large number of other prominent scientific workers of his day, and any sympathetic study of his life obviously would include incidents from and side lights on the careers of numerous of his contemporaries as well. William Bartram, botanist, ornithologist, entomologist, and old time naturalist, was a son of John Bartram, botanist and owner of a long noted botanical garden, and was born at Kingsessing, Pa., February 9, 1739. While still a youth he accompanied his father on numerous natural history collecting trips. After reaching maturity he traveled extensively as naturalist. It is interesting to recall that it was due to Bartram that Alexander Wilson was induced to undertake his "American Ornithology"; also that it was Bartram who drew many of the plates in Barton's "Elements of Botany." He lived, studied and wrote for many years in the old home with a brother to whom the father had willed the garden, and he died at the age of 84 on July 22, 1823. Of Quaker ancestry and a life-long bachelor, he was gentle, shy, and unassuming. Even through the mists of more than a hundred years there are evidences from the quality of his friendships and his goodness of heart that he must have possessed a singularly winning and lovable personality.

The most important single expedition undertaken by him was four years and nine months, from April, 1773, to January, 1778, spent in exploration of various sections of the South, and his most important literary and scientific contribution was his nar-

ration in book form of the results of these travels. In 1791 he published the account under the title "Travels through North and South Carolina, Georgia, East and West Florida, the Cherokee Country, the Extensive Territories of the Muscogulges, or Creek Confederacy, and the Country of the Choctaws; containing an account of the Soil and Natural Productions of those Regions, together with Observations on the Manners of the Indians." Parenthetically, it will be remembered that long titles to books were fashionable in those days. The work was reprinted in England and Ireland, and was translated into German, Dutch, and French, and proved to be of sufficiently sustained interest as to be reprinted as late as 1928. A book having such lasting qualities, and making such a deep impression upon discriminating readers, and influencing the thought and literature of the world for almost a century and a half, surely is of itself enough of a phenomenon as to deserve the attention of the student of literary history. Dr. Fagin's study considers the various qualities of the man and his book which gave it such vitality.

While the multiplicity of his scientific interests renders nearly all of Bartram's work of value to students, it is, however, with his entomological contributions that this review is primarily concerned. It is pointed out by Dr. Fagin that insects constitute an important part of Bartram's landscape. "incredible numbers" torment the horses of his exploration parties "to such a degree as to excite compassion even in the hearts of pack-horsemen." They are "a flying host of persecuting spirits." He is surprised at his failure to notice any bees in West Florida, for "they are so numerous all along the Eastern continent from Nova-Scotia to East Florida, even in the wild forests, as to be thought, by the generality of the inhabitants, aborigines of this continent." He describes with delight the "incredible numbers" of butterflies, and revels in the rich colors of the different species. He observes swarms of grasshoppers, "the favorite delicious food" of rice birds, and describes cochineal insects feeding on cacti. "The female . . . is very large and fleshy, covered with a fine white silk or cottony web, which feels always moist or dewy, and seems designed by nature to protect them from the violent heat of the sun. The male is very

small in comparison to the female, and but very few in number." However, the most impressive of Bartram's descriptions of insects is that of "the small flying insects, of the genus termed by naturalists Ephemera." Three pages are devoted to them, describing their birth, their ephemeral lives, and their death, and ending in a series of philosophical reflections generated by Bartram's contemplation of them. He assures us that "The importance of the existence of these beautiful and delicately formed little creatures . . . whose frame and organization is equally wonderful, more delicate, and perhaps as complicated as that of the most perfect human being, is well worth a few moments contemplation; I mean particularly when they appear in the fly state. And if we consider the very short period, of that stage of their existence which we may reasonably suppose, to be the only space of their life that admits of pleasure and enjoyment, what a lesson doth it not afford us of the vanity of our own pursuits."

The main purpose of Dr. Fagin's biography is to make a comprehensive résumé of the influence of Bartram's writings on the development of nature description; to study the special combination of gifts which he brought to his observation of the American landscape; and, to discuss the various factors which have contributed to his popularity among literary men. The book is interesting and stimulating. Its reading is commended.—J. S. WADE.